

NEKRASOVSKIY, Ya.F., prof., doktor tekhn.nauk; SHILOV, P.M., prof.,
~~prof. tekhn.nauk~~; RUBINSKIY, Yu.M., dotsent, kand.ekon.nauk

Textbook on industrial organization and planning ("Industrial
organisation and planning in coal mines" by S.M.Bukhalo. Re-
viewed by IA.E.Nekrasovskii, EM.Shilov, IU.M.Rubinskii). Ugol'
Ukr. Vol.3 no.5:44 Ky '59. (MIRA 12:9)
(Coal mines and mining)

NEKRASOVSKIY, Yakov El'konovich; RYMAR, Israil' Mironovich; KALMYK,
M.K., otv.red.; ZHUKOV, V.V., red.isd-vs; SABITOV, A., tekhn.
red.; SHKLYAR, S.Ya., tekhn.red.

[Rapid development mining] Opyt skorostnogo provedeniia pod-
gotovitel'nykh vyrabotok. Moskva, Gos.nauchno-tekhn.isd-vo
lit-ry po gornomu delu, 1960. 92 p. (MIRA 13:7)
(Coal mines and mining)

NEKRASOVSKIY, Ya.E., doktor tekhn.nauk; TROFIMENKO, P.M., gornyy inzh.

Basic design of a coal plow and plowing unit for mining
thin steeply pitching coal seams. Ugol' Ukr. 4 no.5:
3-6 My '60. (MIRA 13:8)

1. Dnepropetrovskiy gornyy institut.
(Coal mining machinery)

~~MEKRASOVSKIY~~, Ya.E., prof., doktor tekhn.nauk; ANISHCHENKO, Ye.Ye., inzh.
SAVOST'YANOV, A.V., inzh.

Analysing the basic factors affecting the work indices in mine
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(Stalino Province—Coal mines and mining)

NEKRASOVSKIY, Ya.E., prof.; LOKSHIN, B.S., dotsent

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Izv. vys. ucheb. zav.; gor. shur, no.10:3-8 '60. (MIRA 13:11)

1. Dnepropetrovskiy gornyy institut imeni Artema.
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NEKRASOVSKIY, Ya.E., prof., doktor tekhn.nauk; ANISHCHENKO, Ye.Ye., inzh.;
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Effect of basic mining engineering factors on the technical and
economic indices of mine section operations in the central Donetsk
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NEKRASOVSKIY, Ya.B.; LOKSHIN, B.S.; MASEVICH, M.V.; GRISHKO, N.T.

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SHEVYAKOV, L.D., akademik; IVANOV, A.M.; BUBIR', V.A., gornyy inzh.;
MONIN, M.I., gornyy inzh.; NEKRASOVSKIY, Ya.E., doktor tekhn.-
nauk; SHCHUKIN, V.R.

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article "Pillar systems of mining flat seams without undermining
the wall rock in the development operations." Ugol' Ukr. 6
no.9:43-47 S '62. (MIRA 15:9)

1. Upravlyayushchiy trestom Rutchenkovugol' (for Ivanov).
2. Gosudarstvennyy institut po proyektirovaniyu shakhtnogo
stroitel'stva v yuzhnykh rayonakh SSSR (for Bubir', Monin).
3. Dnepropetrovskiy gornyy institut (for Nekrasovskiy).
4. Nachal'nik upravleniya Donetskogo okruga Komiteta po nadzoru
za bezopasnym vedeniyem rabot v promyshlennosti i gornomu
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(Shamin, A.A.) (Belen'kii, A.M.) (Galkin, A.V.)

YAROVY, A.P.; NEKRASOVSKIY, Ya.E.; LOKSHIN, B.S.; RAKHUTIN, V.S.

Mechanization of coal extraction by means of KMS small-range plows
in mining steeply dipping Donets Basin seams. Ugol' 37 no.3:29-31
Mr '62. (MIRA 15:2)

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Lokshin, Rakhutin).

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POPOV, Georgiy Nikolayevich; NEKRASOVSKIY, Ya.E., prof.^h, retsenzent;
TARTAKOVSKIY, B.N., kand. tekhn. nauk, retsenzent; ARSENT'YEV,
A.I., dots., retsenzent; LAVRINENKO, V.F., dots., retsenzent;
KULIKOV, V.V., kand. tekhn. nauk, otv. red.; PARTSEVSKIY, V.N.,
red.izd-va; SHKLYAR, S.Ya., tekhn. red.; MAKSIMOVA, V.V., tekhn.
red.

[Working mineral deposits] Razrabotka mestorozhdenii poleznykh
iskopaemykh. 2., perer. i dop. izd. Moskva, Gosgortekhnizdat,
1963. 588 p. (MIRA 16:7)

(Mining engineering)

NEKRASOVSKIY, Ya.F., prof., doktor tekhn. nauk; KOLOKOLOV, O.V.,
kand. tekhn. nauk

Technology of filling operations in the Central Donets
Basin Region and ways of improving it. Ugol' 38 no.12:
14-18 '63. (MIRA 17-5)

1. Dnepropetrovskiy gornyy institut.

OSTROVSKIY, Semen Moiseyevich; PETRENKO, Yevgeniy Vasil'yevich;
KORFENEV, Veniamin Grigor'yevich; BOYKO, A.A., retsenzent;
BELOSVETOV, .V., red.; VYSOCHIN, Ye.M., red.; DVOYKIN,
A.I., red.; DENISENKO, A.I., red.; LOKSHIN, B.S., red.;
MARSHAK, I.S., red.; NAYEROV, R.Ya., red.; NEKRASOVSKIY,
Ya.E., red.; RAUSHNIY, A.A., red.; RIPP, M.G., red.

[Handbook for Donets basin miners] Spravochnik shakhtera
Donbassa. Moskva, Izd-vo "Nedra," 1964. 411 p.

(MIRA 17:7)

NEKRASOVSKIY, Ya.E., prof., doktor tekhn. nauk; ZHETESOV, S.S., gornyy inzh.

Effect of the seam thickness on the basic technical and
economic indices of a longwall in the mining of thick
horizontal coal seams. Ugol' 40 no.8:30-32 Ag '65.

(MIRA 18:8)

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NEKRASOVSKIY, Ya.E.; KOLOKOLOV, O.V.

Mining steep thin seams with complete filling. Izv. DGI 42:
157-166 '64. (MIRA 18:11)

NFKRASOVSKIY, Yu.Ya., gornyy inzh.-mekhanik

Calculation of stresses in blasted rock during excavations.
Gor.zhur. no.4:51-53 Ap '64. (MIRA 17:4)

1. Zhdanovskiy zavod tyazhelogo mashinostroyeniya.

NEKRICH, A. M.

Dissertation defended for the degree of Doctor of Historical Sciences in
the Institute of History

"Foreign Policies of the United Kingdom During the Second World War
(September 1939 - June 1941)."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

PHASE I BOOK EXPLOITATION

SOV/5244

Nekrich, Khaim Abramovich

Novyy pribornyy amortizator tipa AFD (New Instrument Shock Absorber, Type AFD) Leningrad, 1960. 16 p. (Series: Leningradskiy dom nauchno-tekhnicheskoy propagandy. Obmen peredovym opytom, no. 55. Seriya: Pribory i elementy avtomatiki, vyp. 10) 5,500 copies printed.

Sponsoring Agency: Obshchestvo po rasprostraneniyyu politicheskikh i nauchnykh znaniy RSFSR.

Ed.: B. S. Epshteyn; Ed. of Publishing House: V. A. Shilling;
Tech. Ed.: V. L. Gvirtz.

PURPOSE: This technical booklet is intended for engineers and designers.

COVERAGE: The booklet describes construction and operating characteristics of the AFD instrumentation shock mount (vibration

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New Instrument Shock Absorber (Cont.)

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absorber) for providing dry-friction damping. Transmissibility characteristics are shown for the range of frequencies between 0 and 200 cps. The effective range of isolation is about 40 cps. In this range input accelerations of 5 g and larger are damped to 1 - 1.5 g, whereas accelerations of less than 5 g result in output levels of approximately 1.0 g. Recommendations and restrictions on installation and alignment are also presented, as are comments regarding applications. This shock mount is in mass production and has been successfully used in various applications. No personalities are mentioned. There are 2 references, both Soviet.

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Types of Shock Absorbers

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BUDNIKOV, P.P.; ~~HEKRICH~~, M.I.

Theory of milling building materials. Trudy MEHTI no.21:2-25 '56.
(Building materials)(Milling machinery) (MIRA 9:9)

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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UU UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ																									
1ST AND 2ND ORDERS																									
PROCESSES AND PROPERTIES INDEX																									
CA 7																									
A rapid method for determining sulfur and carbon in carbonaceous pyrite M. I. Nehrlich. Trans. VI Mendeleev Congr. Theoret. Applied Chem. 1932 2, Pt. 2, 354-6 (1935). - A sample of pyrite dried at 105° is heated in an elec. furnace in a stream of O to 1250°. S is oxidized to SO₂ and C to CO₂. They are absorbed by H₂O and soda lime. SO₂ is detd. by titration of the H₂SO₄ formed and CO₂ by the increase of wt. (b) of the absorbing tubes E. R. Stefanowsky																									
OPEN COMMON ELEMENTS OPEN WATERWAYS INDEX																									
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION 22																									
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1ST AND 2ND CODES																										3RD AND 4TH CODES																									
PRECEDENCE AND PRIORITY INDEX																																																			
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Corrosion of acidproof ceramic materials. M. I. NARRIKH. <i>J. Applied Chem.</i> (U. S. S. R.) 5, 940 (1952). Imported acidproof wares were quickly attacked by H_2SO_4 and were not suitable for use in the Glover tower. Similar products can be made in Russia. V. KALICHURSKY																																																			
ASB SLA METALLURGICAL LITERATURE CLASSIFICATION																																																			
1952-1953																																																			

18

Purification of brine for ammonia-soda factories. M. I. NERICH *Ukrain Khim. Zhur* 7, Wiss.-tech. Teil 17-31(1932).—The brine, contg 15-5% $MgSO_4$ and $CaCl_2$, is treated in the cold with 23 l. of milk of lime and 7.3 kg. of Na_2CO_3 per cu. m. and allowed to settle for 10 hrs. before use. In this way 90% of the impurities are pptd as $Mg(OH)_2$ and $CaCO_3$, leading to considerable economies in NH_3 and heat during the later stages of prepn of Na_2CO_3 . B C A

ASAC 55.4 METALLURGICAL LITERATURE CLASSIFICATION

15

CA

PRODUCTION OF SODIUM SULFIDE BY MEANS OF GASEOUS REDUCING AGENTS.
M. I. Nekrich and I. I. Rivlin. Ukrain. Khim. Zhur. 10, Khim.-tech. II,
367-74(1935). Na_2S was prepd. by heating Na_2SO_4 to 900° with a mixt. of
gases similar in compn. to producer gas. The product (94% yield) consists
of 84% Na_2S .

J.G. Tolpin

ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND DEGREE										3RD AND 4TH DEGREE									
PROCESSES AND PROPERTIES INDEX																			
B-1-7 ACTION OF PHOSPHORIC ACID ON CLAY. P. P. Dudnikov, M. I. Malytshch, and A. B. Kvitnitski (J. Appl. Chem. Russ., 1936, 9, 986-994).--Masses of clay or kaolin preheated at 200-700°, treated with 25% H_3PO_4, and dried at 120° are more resistant to disintegration when immersed in H_2O or aq. acids than when H_3PO_4 is absent. The optimum temp. for action of H_3PO_4 is at 60°. Part of the H_3PO_4 is irreversibly bound by the clay, probably as silicophosphate and as $AlPO_4$. Considerable heat is evolved during the process. R. T.																			
ASB-11A METALLURGICAL LITERATURE CLASSIFICATION																			
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117 AND 118 (20)										119 AND 120 (20)									
PROCESSES AND PROPERTIES INDEX																			
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Conversion of sodium sulphate into sulphide and carbonate. M. NERETSKY and J. KARASHKA (Trans. Inst. Chem. Charlov Univ., 1936, 4, No. 13, 140-155).—80% conversion of Na_2SO_4 into Na_2S is achieved by the action of CH_4 at 800°. Steam and CO_2 are then passed at 300° to give a product containing 98% of Na_2CO_3. R. T.																			
450-550 METALLURGICAL LITERATURE CLASSIFICATION																			
EDM STUBBINS										EDM STUBBINS									
EDM STUBBINS										EDM STUBBINS									

NEKRICH, M. I.

Budnikov, P. P. and Nekrich, M. I. Silicate Materials in the chemical industry.
J. Applied Chem. (U.S.S.R.) 11, 151-75 (1938).--A review with about 206 references is
given.

1ST AND 2ND CODES																										3RD AND 4TH CODES																									
PROCESSES AND PROPERTIES INDEX																																																			
BC																										B-I-8																									
Formation of aluminates from bauxite mixtures containing sulphates. M. L. Himmelfarb and A. J. Krasavina (Vses. Cherkov Chem. Tech. Inst., 1936, No. 2, 108—112).—The formation of aluminates on fusion of bauxite with sulphates, with or without Na_2CO_3, has been examined. CaSO_4 gives promising results. R. C.																																																			
ASB 154 METALLURGICAL LITERATURE CLASSIFICATION																																																			

1ST AND 2ND COVER										3RD AND 6TH COVERS									
PROCESSES AND PROPERTIES INDEX																			
CA					18														
Production of soda from the sodium sulfate of Uralskintan. M. I. Nekrich. <i>Trudy Kharkov. Khim.-Tehkhol. Inst. im. S. M. Kirova</i> 4, 103-12(1944) (in Russian). Local raw materials, Na_2SO_4, from lakes, local limestone, and coal, were found suitable for Leblanc soda production; the batch is made up of these materials in the wt. ratio 121:111:85, corresponding to $\text{Na}_2\text{SO}_4:\text{CaCO}_3:\text{C} = 100:100:75$. The Na_2CO_3 content in the melt reaches 37%; the yield with respect to Na_2SO_4, 88%. With non-standard batches, the ratio $\text{NaOH}/\text{Na}_2\text{CO}_3$ could be raised to 19.7. N. Thon																			
A10-51A METALLURGICAL LITERATURE CLASSIFICATION																			
EDITION: STYRENE										EDITION: BOMBO									
TESTING AND ANALYSIS										REVISION									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20									

1ST AND 1ST SERIES		2ND AND 2ND SERIES	
PROCEDURES AND PROPERTIES INDEX			
c Complete utilization of aluminas. M. I. NERENOV, A. N. TOSITLIN, AND A. YA. KRAINYAVA. <i>Trudy Khim. Tekhn. Inst. im. S. M. Kirova</i>, 1945, No. 5, pp. 187-88.—In obtaining alumina by sintering alunite concentrate (30 to 37 Al_2O_3 and 30 to 35% SO_3) and alunite ore (20 to 25 Al_2O_3 and 15 to 20% SO_3) with Na and K sulfates and coal, the recovery of sulfur can best be accomplished by using 35 to 40 parts of coal for 100 parts of alunite and sintering at a temperature not lower than 900° to 950°C. B.Z.K.			
A.S.S. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION			
BSCM SYMBOLISM		BSCM SYMBOLISM	
SYMBOL MAP DIV. ONE		SYMBOL MAP DIV. TWO	
SYMBOL MAP DIV. THREE		SYMBOL MAP DIV. FOUR	

CA

18

Desulfurization of oxides. H. M. L. Schuch, *Deposits, Abstr. Numb. 1, 1950, 195:200; C.A. 50, 4276*. --Briggets (20 g.) were prepd. from 100 parts of CaSO_4 (44.79% SO_3 , 33.02% CaO , 1.92% H_2O , 0.64% insol., and 19.5% wt. loss on ignition), 40 parts birchwood charcoal, and 6 parts Na_2S and were treated with a stream of Cl (97.8%) at the rate of 5-6 l. per hr. at various temps. Reaction commenced at 300°, 3.2% reacting in 1 hr. The rate of reaction increased, reached a peak at 710° (89% reaction in 1 hr.), and then declined (65.4% reaction at 815° in 1 hr.). S balance at 750° after 1 hr. was: S chlorides, 56.5%, elementary S, 32.2%; sulfate, 0.0%; and the remainder (3.3%) unaccounted for. The decrease in rate above 710° is discussed. Reaction between CaS and Cl commenced at 150°. Rate of reaction increased with temp., 81.1% having reacted in $\frac{1}{2}$ hr. at 900°, the max. temp. used. At 700°, 73% of CaS reacted in 1 hr. The slower reaction as compared to CaSO_4 is ascribed to coating of unreacted CaS with molten CaCl_2 . Effect of coating is less pronounced as temp. is raised and CaCl_2 becomes more fluid.

Murray Senkus

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1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX

B

9496 Chemical and Petrographic Study of Soda Slag.
M. I. Nekrich and L. I. Karyakin. Henry Bratcher. Translation
2009, 7 pages. From *Doklady Akademii Nauk SSSR* (Reports of
the Academy of Sciences of the USSR), new ser. A, 74, 1950,
p. 795-797.

The recovery of soda from soda slag, obtained in the desulfurization of pig iron outside the blast furnace, is discussed. The cause for the low soda recovery (75.78%) from such slag is considered. Composition of slag sample was studied. Petrographic data are presented.

430-554 METALLURGICAL LITERATURE CLASSIFICATION

HIGH TEMPERATURE REACTION METALLURGY

C D E F G H I J K L M N O P Q R S T U V W X Y Z

ACS

2

Utilization of silicate slags in glassmaking. M. A. NERESH
AND I. B. BONDARENKO. *Steklo i Keram.*, 8 (9) 10 (1961).—An
experimental batch consisting of sand 180, chalk 20, sulfate 10,
and alkaline slag from the demetallization of iron 100 kg. was
melted at 1200°C. The slag analyzed SiO_2 34.80, Fe_2O_3 2.10,
 Al_2O_3 3.30, CaO 4.20, MgO 5.40, MnO 8.10, and Na_2O 39.9%.
The glass composition was SiO_2 60.21, $\text{Al}_2\text{O}_3 + \text{Fe}_2\text{O}_3$ 3.20, CaO
5.80, MgO 2.06, Na_2O 16.55, and MnO 2.17%. Viscosity (by
Stokes' method) was 1998 poises at 1000° and 1124 poises at
1200°. The glass showed slight surface crystallization after 2
hr. at 100° to 850° but not below 800° and above 850°. It showed
no deposit after 24 hr. in HCl vapors. B.Z.K.

1. BUDNIKOV, P.P., NEKRICH, M.I., PANKOVA, L.P.
2. USSR (600)
4. Slag cement
7. Alkaline slag as slurry fluidizer. TSement no. 2, 1952. Inzh.
9. Monthly List of Russian Accessions. Library of Congress, August, 1952.
Unclassified.

NEKRICH, M.I.; MOSTOVOY, Ya.P.

Glass and ware from soda slag. Steklo i Keram. 9, No.4, 9 '52. (MLBA 5:5)
(CA 47 no.18:9580 '53)

NEKRICH, M. I.

FD-3361

USSR/Chemistry - Sulfides, production of

Card 1/1 Pub. 50 - 5/20

Author : Budnikov, P. P., Corr Mem Acad Sci USSR; Prof Nekrich, M. I.

Title : Concerning the mechanism of the reduction of sulfates with carbon in the solid phase

Periodical : Khim. prom. No 7, 402-403, Oct-Nov 1955

Abstract : Investigated the reduction with carbon of sulfates of sodium, magnesium, and alkaline earth metals to sulfides. On the basis of the results obtained, arrive at the conclusion that the process does not take place in the solid phase: there is always formation of carbon monoxide, which acts as the reducing agent. Four references; 3 USSR, one since 1940.

Institution : --

Submitted : --

15-1957-10-14116

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 120 (USSR)

AUTHORS: Karyakin, L. I., Nekrich, M. I.

TITLE: The Petrography of Blast-Furnace Slags and of Castings
Made From Them (K petrografii domennykh shlakov i lit'ya
iz nikh)

PERIODICAL: Sb. nauchn. rabot po khimii i tekhnol. silikatov.
Moscow, Promstroyizdat, 1956, pp 138-143

ABSTRACT: The authors describe an experiment in using blast-
furnace slag from factories in the southern USSR as
material for manufacturing pipe. The slag used was in-
homogeneous in outward appearance: greenish and gray
with intermediate gradations. The principal minerals of
the greenish-gray slag are melilite (38%) and glaucoc-
hroite (39%). The optical properties of these two min-
erals are given. The sulfides--represented by oldhamite,
CaS, and alabandite, MnS--make up 8%. Glass forms 14 to
15%. The gray slag has the same general composition,

Card 1/2

15-1957-10-14116

. The Petrography of Blast-Furnace Slags and of Castings Made From Them

but it contains more melilite (42%) and brown glassy material (24.7%). The slags melted at 1500°. The fused mass was either poured out into a stationary earthen mold or fashioned in a centrifuge. After firing, part of the pipe had fractures, which were produced by unequal crystallization. It was shown that the black parts, consisting of 70% glass with grains of melilite distributed irregularly through it, are the most brittle. The gray parts have less glass, with regularly distributed crystals of melilite in it, and are stronger. To improve the quality of the castings, the authors recommend the development of a method of firing during which material may be added.

Card 2/2

N. N. Kurtseva

BUDNIKOV, P.P.; NEKRICH, M.I.

Some problems of powder grinding. Porosh.met. 1 no.6:17-26
M-D '61. (MIRA 15:5)

1. Moskovskiy ordena Lenina khimiko-tekhnologicheskoy institut
imeni Mandeleeva.

(Powder metallurgy)

NEKRICH, M.I.; POLOVIN, R.V.

Rate of solid phase reactions. Dop. AN URSR no. 4:511-513 '61.
(MIRA 14:6)

1. Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina.

Predstavleno akademikom AN USSR P. P. Budnikovym.

(Chemical reaction, Rate of)

NEKRICH, M.I.; BUDNIK, L. Ya.; GOTLINSKAYA, A.P. [Hotlins'ka, A.P.]

Effect of alkaline slag on the reduction in the viscosity of
cement slurry. Dop. AN URSS no.6:779-782 '61. (MIRA 14:6)

1. Khar'kovskiy politekhnicheskii institut. Predstavleno
akademikom AN USSR P. P. Budnikovym.
(Portland cement)
(Slag)

HEKRICH, Ye.I., inzh.; DOBRYNIN, B.F., inzh.; SHLYAPNIKOVA, A.G., inzh.

Organizing the production of reinforcements at the Obukhovo
Housing Construction Combine. Biul.tekh.inform.po stroi. 5
no.12:5-7 '59. (MIRA 13:4)
(Leningrad--Reinfoced concrete)

NEKRICH, Ye.I.; ARANE, M.Yu.; SMIRNOV, N.A., prof., red.; SHILLING,
V.A., red. izd-va; GVIRTIS, V.L., tekhn. red.

[Overall mechanization and automation in housing construction
combines] Kompleksnaia mekhanizatsiia i avtomatizatsiia na
domostroitel'nykh kombinatakh. Pod obshchei red. N.A.Smirnova.
Leningrad, Leningr. dom nauchno-tekhn.propagandy, 1961. 34 p.
(Bibliotekhka stroitel'ia po mekhanizatsii i avtomatizatsii
stroitel'stva, no.3) (MIRA 15:8)
(Leningrad—Precast concrete) (Apartment houses)
(Automation)

NEKRICH, Ye.

Using the method of Leningrad housing construction workers.
Na stroi.Ros. no.12:32 D '61. (MIRA 16:1)

(TSelinograd—Apartment houses)
(Precast concrete construction)

NEKRICH, Ye.I., inzh.

Automation and mechanization at the Obukhovo Housing Construction
Combine. Mekh.stroi. 18 no.9:12-15 3 '61. (MIRA 14:10)

1. Glavnoye Leningradskoye upravleniye po zhilishchnomu i
grazhdanskomu stroitel'stvu.
(Leningrad---Precast concrete)

NEKROT, A.A. [Nekrot, A.O.]

Method of angular collective variables for computing the
statistical sum of a mixed ionic-dipole system. Part 1.
Classical case. Ukr. fiz. zhur. 8 no.5:560-567 My '63.

(MIRA 16:8)

1. L'vovskiy gosudarstvennyy universitet im. Franko.

YUKHNOVSKIY, I.R.; NEKROT, A.A.

Some properties of binary functions of distribution of a
mixture of ions and dipole molecules. Ukr. fiz. zhur. 9
no.4:365-375 Ap '64. (MIRA 17:8)

1. L'vovskiy gosudarstvennyy universitet.

L 18249-63 EWT(1)/HDS/EEC(b)-2/ES(w)-2 AFFTC/ASD/ESD-3/LJP(C)/SSD

ACCESSION NR: AP3002117 F1-4/Po-4/Pab-4 S/0185/63/008/006/0633/0644

AUTHOR: Yukhnovskyy I. R., Nekrot, A. O.

TITLE: Free energy and binary distribution functions of a mixed ion-dipole system.

SOURCE: Ukrains'kyy fizychnyy zhurnal, v. 8, no. 6, 1963, 633-644

TOPIC TAGS: ion, molecule, dipole, ion-dipole interaction virial coefficient, third virial coefficient, free energy, ion-dipole plasma, binary distribution function

ABSTRACT: This paper is continuation of a study published previously by the authors in the same journal in issue 7, 1962 and issue 8, 1963. A classical system consisting of ions and dipoles distributed in space is taken, and equations leading to the determination of the free energy of this system are developed. The free energy is thus determined accurately up to the third complete virial coefficient. Binary distribution functions are also calculated. Particular cases of these functions are functions for ion systems described by Yukhnovskyy in this journal in issue 4, 1959, and functions for systems of molecules described by

Card 1/2

NEKRUTENKO, Yu.P.

Methods of quantitative analysis of the wing pattern of
Pieridae (Lepidoptera). Dcp. AN URSR no.3:405-407 '64.

(MIRA 17:5)

1. Institut geologicheskikh nauk AN UkrSSR. Predstavleno
akademikom AN UkrSSR A.P. Markevichem [Markevych, O.P.].

NEKHUTENKO, Yu.F.

Revision of the genus *Aptura* (Lepidoptera, Nymphalidae).
Dop. AN URSS no.10:1391-1392, 1964. (MIRA 17:12)

1. Institut geologicheskikh nauk AN UkrSSR. Predstavleno
akademikom AN UkrSSR A. I. Markevichem [Markevych, O.P.].

NEKRUTENKO, Yu.P.

Apaturinae of the palaearctic fauna. Zool. zhur. 43 no.7:1041-1046 '64.
(MIRA 17:12)

1. Kiev State University.

NEKRUTENKO, Yu.P.

Unusual variability of *Satyrus actaea* Esp. (Lepidoptera, Satyridae)
in the Crimea and its possible causes. Zool. zhur. 44 no.4:617-620
'65. (MIRA 18:6)

1. Institut geologicheskikh nauk AN UkrSSR, Kiyev.

NEKRUTENKO, Yu.P.

New Tertiary representative of the family Nymphalidae
(Lepidoptera, Rhopalocera). Paleont. zhur. no.4:97-99
'65. (MIRA 19:1)

1. Institut geologicheskikh nauk AN UkrSSR. Submitted April 16,
1964.

NEKRUTENKO, YU. P.

USSR/ Biology - Ichthyology

Page 1/1 Feb. 86 - 26/82

Author : Nekrutenko, Yu. P. (Kiev)

Title : Fishes of the Anabantidae family

Periodical : Priroda 45/1, 110-112, Jan 56

Abstract : An explanation is given of how fishes of the family Anabantidae are able to use the oxygen of the atmosphere as well as that from air dissolved in water. Several subdivisions of this family are cited. The method of spawning and hatching is described. The habitats are indicated. Five references: 1 Sov., 2 Eng., 1 Czech., and 1 Germ. (1909-1954). Map.

Institution :

Submitted :

NEKRUTENKO, Yu.P.

New labyrinth fishes. Priroda 46 no.6:112-113 Je '57. (MLA 10:7)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Tropical fish)

NEKRUTENKO, Yu.P.(Kiyev)

Metamorphosis of the nymph into a dragonfly. Priroda
no.6:108-109 Je '60. (MIRA 13:6)
(Dragonflies)

DEM'YANKOV, N., inzhener; NEKRUTMAN, S., inzhener.

The operation of railroad refrigerator cars having mechanical
refrigeration. Khol.tekh.33 no.1:29-32 Ja Mr '56. (MLRA 9:7)
(Refrigerator cars)

VEKRUTMAN, S., inzh.

Determination of the optimum heat transfer coefficient of insulating walls of refrigerator cars. Khol. tekhn. 35 no. 3:4-6 My-Je '58.
(MIRA 11:7)

1. Moskovskoye depo poyezdov-refrizheratorov.
(Refrigerator cars)
(Insulation(Heat))

NEKRUTMAN, S. V.: Master Tech Sci (diss) -- "Investigation of the problems of operating the refrigerating and power equipment of isothermic rolling stock with mechanical refrigeration". Moscow, 1959. 11 pp (Min Transportation USSR, Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers im I. V. Stalin), 150 copies (KL, No 15, 1959, 117)

NEKHUTMAN, Semen Veniaminovich; OSADCHUK, Grigoriy Ivanovich; SERIPKIN, Viktor Vasil'yevich; TSARENKO, A.P., red.; BOBROVA, Ye.N., tekhn.red.

[Experience in transporting perishable freight; practices of the depot of refrigerated trains in the Moscow suburban station]
Opyt perevozki skoroprotiashchikh gruzov; iz praktiki depo refrigiratornykh poezdov stantsii Podmoskovnaya. Moskva, Gos. transp.shel.-dor.isd-vo, 1959. 96 p. (MIRA 12:6)
(Railroads--Freight)

MARINOV, Girsh Ayzikovich; NEKRUTMAN, Semen Veniaminovich; OSADCHUK, Grigoriy Ivanovich; MARTYNOV, M.S., inzh., retsenzents; TSARENKO, A.P., inzh., red.; MEDVEDEVA, M.A., tekhn. red.

[Operation of cars with mechanical refrigeration] Eksploataatsiia vagonov s mashinym okhlazhdeniem. Moskva, Transzheldorizdat, 1962. 163 p. (MIRA 15:6)

(Refrigerator cars)

SKRIPKIN, Viktor Vasil'yevich; NEKRUTMAN, Semen Veniaminovich;
BELYASOVA, L.P., inzh., ~~retsensent~~; LYSENKO, N.Ye., inzh.,
retsensent; BAKRADZE, Yu.M., inzh., retsensent; SARANTSEV,
Yu.S., inzh., red.; USENKO, L.A., tekhn. red.

[Electric equipment of refrigerator cars] Elektrooborudo-
vanie izotermicheskogo podvizhnogo sostava. Moskva, Trans-
zheldorizdat, 1962. 294 p. (MIRA 15:9)
(Refrigerator cars—Electric equipment)

NEKRUTMAN, Semen Veniaminovich; FAYERSHTEYN, Yuliy Oskarovich;
FILIPENOK, Petr Andreyevich; TSYPLAKOV, Nikolay Vasil'yevich;
SHCHEPETOV, Al'bert Viktorovich; BAKRADZE, Yu.M., inzh.
retsenzent; BRAYLOVSKIY, N.G., inzh., red.; MEDVEDEVAM N.
tekhn. red.

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47 no.10:45-51 0 '65. (MIRA 18:10)

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2. Rukovoditel' laboratorii klimaticheskikh ustanovok Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta Ministerstva putey soobshcheniya (for Rubinchik).

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1. Institute of Sera and Vaccines, Prague.

NEKVASILOVA, Olga; PROKOP, Rudolf

~~Saccocoma~~ Agassiz, 1835 (Crinoidea, Articulata) from the Upper Cretaceous of Bohemia. Vest Ust geol 39 no.3:215-216 My '64.

1. Geological Institute, Czechoslovak Academy of Sciences, Prague: Central Geological Institute, Prague.

NEKRYACH, YE. F.

USSR/Chemistry - Dispersed Systems
Chemistry - Heat of Hydration

Mar/Apr 1948

"Lyophilic of Dispersed Systems: II. Heat of Hydration of Starches, Gelatins, Agar, and Silicon Anhydride With Water and Alcohol," A. V. Dumanakiy, Ya. F. Mezhenyy, Ye. F. Nekryach, Colloidal Lab, Inst of Gen and Inorg Chem, Acad Sci USSR, 9 pp

"Kolloid Zhur" Vol I, No 2

Discusses the heat of hydration of starchy water and alcohol, starchy water and sugar, solutions of starch and water and alcohol and water, gelatin and agar with alcohol and alcohol solutions, and silicon anhydride powder. Gives conclusions obtained as result of the experiments. Submitted 2 Jan 1948

PA 7077

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Heats of wetting and the hydrophobicity of flour. A. V. Dumanishvili and E. P. Nefedov. *Kolloid. Zhur.* 13, 206 (1951).—Flour was kept over a% H₂O until equil.; then the water content γ of the flour was 20-35%, 12-14%, 11-13%, and 4.5-5.0% at $\theta = 5, 20, 60$, and 90%. The differences between γ of wheat flour (3 sorts), rye (2 sorts), barley, and oat flour were insignificant. The heat of wetting (cf. C.A. 45, 7781) decreased when γ increased; it was 22-28, 1.5-2.0, 4.5-5.5, and 0.4-0.7 cal./g. at $\gamma = 0, 10, 14$, and 30%. The calcd. amt. of bound H₂O was 20-35%, almost independent of the nature of flour. J. J. R.

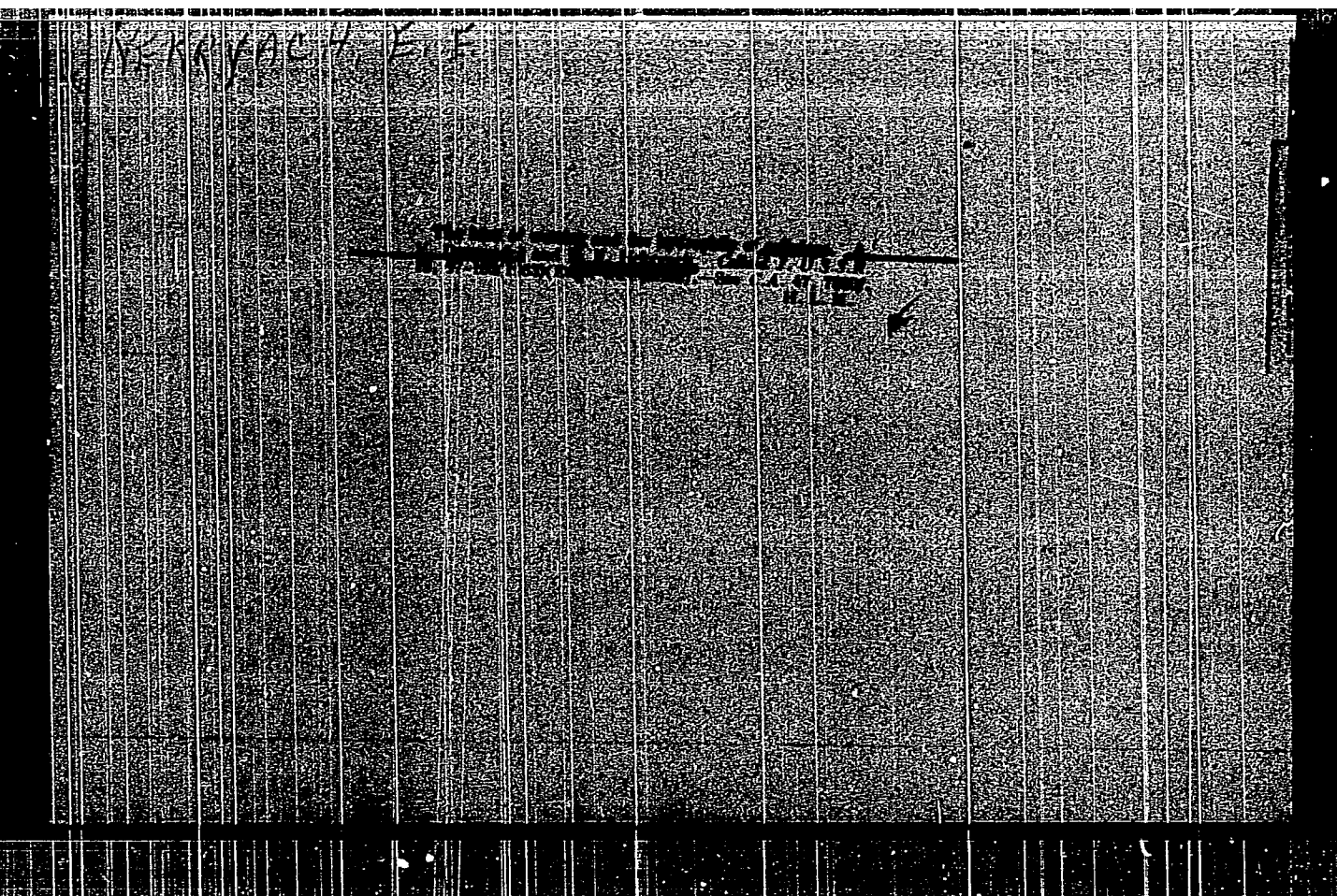
147

SAMCHENKO, Z.A. [Samchenko, Z.O.]; KUKOVSKIY, Ye.G. [Kukovs'kiy, YE.H.];
NEKRYACH, Ye.F. [Nekriach, YE.F.]

X-ray diffraction study of the structure of polyundecanamide.
Dop. AN URSR no.2:229-231 '65. (MIRA 18:2)

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2. USSR (600)
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7. The second All-Union Conference on colloid chemistry in Kiev, June 13-18, 1950. (Problems of structure formation and solvation.) A.V. Dumanskiy, YE.M. Natanson, YE.F. Nekryach, Ukr.khim.zhur. 16 no. 6, 1951.
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Cement Kilns

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No. 1, 1953.

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SO: SUM 318, 23 Dec 1954

NEK Ryach, FF

[illegible]

688

NEKRYACH, Ye. F.

V. Heat of wetting and hygroscopicity of some natural high polymers. *Dokl. Akad. Nauk SSSR*, 17, 171-174 (1966). Cf. preceding paper. If the heat of wetting of bound H_2O is known, its d_b can be calculated from the equation $d_b = d_{\text{wet}} - d_{\text{free}}/d_{\text{wet}}$ (cf. Vol. 3, No. 1, 1966, p. 171). d_b is d of free H_2O , d_{wet} is d of wetted polymer. d_{wet} is apparent d of water in H_2O . From data in C.A.B. and d_b is apparent d of water in H_2O . From data of starch, agar, and lignin, d_b is 1.20. With this value and the d_{wet} and d_b as found by Laue (C.A.B. 48, 71425) the heats of wetting are calculated; they agree with those found by L. Also in Colloid J. U.S.S.R. 17, 100-101 (1966) (Eng. translation).

J. J. Blum

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Inst. Gen. & Inorg. Chem., AS USSR, Kiev

NEKRYACH, Ye. F.

07
 Study of interaction of α -irradiation with H_2O_2 and H_2O_2 in the presence of H_2O_2 .
 A. V. Deryabin and S. P. Nikitina. *Kolloid. Zh.* 17, 174-176 (1955). 2 pages, abstract. The heat (q) of interaction of α -irradiation with H_2O_2 (conc. 4%) up to 10% at $t = 20^\circ\text{C}$ is 1.22 cal/g. at 15.4-14.1, 16.1-17.3, 18.5-16.1, and 17.1-15.8 cal/g. at 17.3-16.1, 16.1-15.8, and 15.8-14.1 cal/g. respectively. According to the other data, q is not always a linear function of α dose, which is, the most, may differ from 1.22 cal/g. may depend on the nature of the solution. Also in *Kolloid. Zh.* U.S.S.R. 17, 161-6 (1955) (Engl. transl. 1955).
 I. J. Bikergo

3

NEKRYACH, Ye.F.

Model of a calorimeter without a special stirrer. Zav.lab.21 no.10:
1248-1249 '55. (MIRA 9:1)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk.
(Calorimeters)

NEKRYACHA, E. F.

[illegible]

NEKRYACH, E. F.

Effect of sodium chloride on the process of purification of
 waste matter in pulp and brown stock. E. F. Nekryach,
 E. V. Nekryach, and E. N. Kozlovskiy. Zhur. Prikl.
 Khim. 36: 151-152 (1963).—Addn. of NaCl to waste matter
 of pulp and brown stock already purified by previous treat-
 ment with NaOH results in increased yield of humate. The
 optimum is gained with higher concn. of NaCl (2-10%).
 However, a preliminary treatment of pulp with 0.5-10%
 NaCl requires the use of less 5% NaOH; whereas the use of 10%
 NaCl requires less 2.5% NaOH for reaching the same
 concn. of humate as is obtained by the use of 10% NaOH
 alone. Then posttreatment with eq. NaCl aids the forma-
 tion of alk. humate. Simultaneous use of NaCl and NaOH
 results in a concn. of Na humate which is attained by the
 use of NaOH, followed by NaCl. The recommended treat-
 ment involves the use of eq. NaCl to form humate in the
 solid phase, followed by removal of excess NaCl which hin-
 ders precipitation of humate; after such removal the humates
 are purified readily by small concn. of NaOH. G. M. K.

NEKRYACH, E. F.

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SDV-21-58-9-13/28

AUTHORS: Dumanskiy, A.V., Academician of the AS UkrSSR, Nekryach, Ye. F. and Samchenko, Z.A.

TITLE: Heat of Wetting and Hydration of Cations (Teploty smachivaniya i gidratatsiya kationov)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 9, pp 966 - 969 (USSR)

ABSTRACT: Different viewpoints on the effect of the nature of cations on the hydrophilic properties of clays and soils are given by Sergeyev [Ref.1], Gapon and Zuyev [Ref.2], Antipov-Karatayev [Ref.3], Janert [Ref.4], Sharov [Ref.5] and Ovcharenko [Ref.6]. This problem was investigated by the authors by studying the heats of wetting salts of the same cations but with simpler anions. The following salts were studied: CaCO_3 , MgCO_3 , BaCO_3 , SrCO_3 , CaSO_4 , BaSO_4 and SrSO_4 . On the basis of investigating the heats of interaction with water of these bivalent salts, the cations of which are frequently contained in the composition of clay complexes, a conclusion was drawn that the hydrophilia of clays depends mainly on the magnitude of specific surface rather than on hydration of cations. Exchange cations, without directly affecting the hydrophilia, may change the structure of the micro-

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Heat of Wetting and Hydration of Clations

100-21-58-041-24

aggregates of the particles and thereby change the magnitude of their surface. There are 2 tables and 10 references, 8 of which are Soviet, 1 German and 1 unidentified

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR
(Institute of General and Inorganic Chemistry of the AS UkrSSR)

SUBMITTED: April 3, 1959

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Clays--Moisture factors
2. Soils--Moisture factors
3. Ions--Chemical effects
4. Salts--Chemical reactions
5. Salts--Thermal effects

Card 2/2

AUTHORS: Nekryach, Ye. F., Dumanskiy, A. V., SOV/20-121-1-38/55
Corresponding Member, Academy of Sciences, USSR

TITLE: The Heats of Wetting of Etherificated Cellulose by Water
(Teploty smachivaniya vody eterifitsirovannoy tsellyulozy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 1,
pp. 136 - 137 (USSR)

ABSTRACT: The present paper gives an account of the investigation of the influence of the degree of etherification of cellulose on its hydrophilic properties; also the influence of the chemical nature of the substituting groups and of the pre-treatment of the cellulose is examined. Samples of methyl, ethyl, oxy-ethyl cellulose (which were synthesized from cotton-linter), and methyl cellulose from viscous silk were investigated. The method for the measurement of the wetting heats has been described already before (Ref 4). The results are illustrated by a diagram. The dependence of the wetting heats of all investigated cellulose samples on the degree of etherification shows the same character all the way through: The wetting heats first increase, reach a maximum at a certain

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The Heats of Wetting of Etherificated Cellulose by
Water

SOV/26-121-1-38/55

degree of etherification, and then decrease again. The absolute values of the wetting heats of ethers depend on the chemical structure of the ether group and on the structure of the original cellulose material. The intrusion of a radical with many carbon atoms into the macro-molecule of the cellulose renders the product of substitution more hydrophilic. The maxima of the wetting heats in all samples occur at a degree of etherification of $\sim 8\%$. The hydrophilic properties of the cellulose ethers are very much influenced by their treatment previous to etherification. Differences in the absolute values and in the position of the maxima were observed. There are 1 figure and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk USSR
(Institute of General and Inorganic Chemistry, AS Ukr SSR)

SUBMITTED: March 27, 1958
Card 2/3

The Heats of Wetting of Etherificated Cellulose by
Water

SOV/20-121-1-38/55

1. Ethyl cellulose--Chemical properties
2. Ethyl cellulose--Physical properties
3. Methyl cellulose--Chemical properties
4. Methyl cellulose--Physical properties
5. Cellulose--Thermodynamic properties
6. Cellulose--Moisture factors

Card 3/3

NEKRYACH, Ye.F. [Nekriach, IE.F.]; NAZARENKO, Yu.P.; CHERNETSKIY, V.P.
[Chernets'kyi, V.P.]; [Babko, A.K.], akademik, otv.red.;
ROZUM, Yu.S., kand.khim.nauk, red.; FIALKOV, Ya.A. [deceased],
red.; FOMENKO, G.S. [Fomenko, H.S.], kand.khim.nauk, red.;
SHEKA, I.A., prof., doktor khim.nauk, red.; GNATYUK, G.M.
[Hnatiuk, H.M.], red.-leksikograf; POKROVSKAYA, Z.S.
[Pokrovs'ka, Z.S.], red.izd-va; YEFIMOVA, M.I. [IEfimova, M.I.],
tekhn.red.

[Russian-Ukrainian chemical dictionary; 6000 words] Rossis'ko-
ukrains'kyi khimichnyi slovnyk; 6000 terminiv. Kyiv, Vyd-vo
Akad.nauk UFSR, 1959. 204 p. (MIRA 15:5)

1. AN USSR (for Babko). 2. Chlen-korrespondent AN USSR (for
Fialkov).

(Chemistry--Dictionaries)
(Russian language--Dictionaries--Ukrainian)

5(2)

SCV/1-1-1-1/1/1/1

AUTHORS: Nekryach, Ye F. and Natanson, S.M.

TITLE: A Study of the Coagulation of Sodium Humate Solutions

PERIODICAL: Dopevidi Akademii Nauk Ukrain'skoi RSR, 1977, No. 1, pp. 400-402 (USSR)

ABSTRACT: The increased need in sodium humate solution as used for stabilization of clay suspensions in drilling for oil and natural gas demands that such solutions be produced on a wider industrial basis. The authors conducted a study of this matter by way of coagulating sodium humates from aqueous solutions with the use of sodium chloride, and established the resulting ratios of humate and salt solutions yielding the maximum of sodium humate as sediment. The authors used a water suspension of lime, milled brown coal from the Aleksandriyskaya coal deposits (35% of humic acid, 12% of ash content), mixed it with a concentration of sodium chloride and heated the solution 1-1.5 hours at

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307/ 1000-1000

A Study of the Biological Activity of Sodium Humate 3-11-66

80-90°C. Upon cooling, the residues of brown color were separated by centrifuging. The contents of sodium humate was examined by colorimetric analysis weighing. The experiments showed that the humates were capable of separating and separating in a short without preliminary washing. In addition, it was concluded that the above-mentioned humates could be used for the production of sodium humate concentrates. It was also found that the humates of humates in the solution of separation of separated humates, depending upon the amount of humate, 2 types of natural and types of humates.

Card 2/3

A Study of the Coagulation of Sodium Humate Solutions 3577

There are 1 graph and 1 moving reference.

ASSOCIATION: Institut obshego i neorganičeskoy khimii AN UkrSSR
(Institute of General and Inorganic Chemistry of the
AS UkrSSR)

PRESENTED: By A. V. Dumanskiy, Member of the AS UkrSSR

SUBMITTED: December 22, 1958

Card 3/3

AUTHORS: Mekryach, Ye.F., Natanson, E.M. DOV/10-22-2-20/56

TITLE: Concentration of Sodium Humate Solutions (Konzentratsiya rastvorov gumatov natriya)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, No 1, pp 350-353 (USSR)

ABSTRACT: The production of basic humate solutions in a concentrated form is an important problem of lignite mining. The concentration may be carried out by removing the excess of water mechanically or by evaporation. The addition of sodium salt to basic humate solutions causes their coagulation. After removal of the liquid phase from the gel-like precipitates of sodium humates their peptisation ability in water without preliminary washing has been tested. If 1 volume of saturated salt solution is added to 1 volume of basic humate solution, nearly all humates are precipitated. These precipitates peptise spontaneously in water.

Card 1/2

Concentration of Sodium Humate Solutions

SOV/86-32-2-20/56

There is 1 graph, 1 table, and 2 Soviet references.

ASSOCIATION: Institute of General and Inorganic Chemistry of the USSR
Academy of Sciences (Institut obshchey i neorg. khimicheskoy
khimii AN USSR)

SUBMITTED: July 19, 1957

Card 2/2

NEKRYACH, Yevgeniy Fedorovich [Nekriach, IE.F.]; KILEROG, M.M.
[Kilieroh, M.M.], red. izd-va; LISOVETS, O.M. [Lysovets', O.M.],
tekhn. red.

[Artificial and syntehtic fibers] Shtuchnye ta syntetychne volokno.
Kyiv, Vyd-vo Akad. nauk URSR, 1960. 64 p. (MIRA 13:12)
(Textile fibers, Synthetic)

S/069/60/022/03/05/019
B004/B007

AUTHORS: Nekryach, Ye. F., Samchenko, Z. A.

TITLE: Sorption of Water Vapor and the Wetting Heat of Some
Polyamides

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol. 22, No. 3, pp. 288 - 292

TEXT: It was the aim of the present paper to carry out a comparative investigation of the sorption and hydrophile properties of polycaprolactam (Capron)¹ and polyhexamethylenedipamide (Anid)². In these compounds one carbamide group corresponds to the same number of methylene groups, but they differ in structure. Capron was supplied by the Kiyevskiy zavod iskusstvennogo shelka (Kiyev Rayon Factory) and Anid by the Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (All-Union Scientific Research Institute of Synthetic Fibers). First, powders of these resins were produced partly by mechanical grinding and partly by precipitation from a solution of CaCl_2 in methanol. The sorption isothermal lines were determined pycnometrically at 20°C

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Sorption of Water Vapor and the Wetting Heat
of Some Polyamides

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B004/B007

(Ref. 6), the wetting heats at 20°C in an adiabatic calorimeter (Refs. 7-9). A table shows (for Capron) the dependence of the wetting heat on the manner of producing the powder (mechanically ground or precipitated) and on the manner of drying (in air at 110°C, in a vacuum at 60 or 100°C). Further experiments were carried out only with precipitates which had been dried in a vacuum at 60°C. The following experimental data are given: Fig. 1: Isothermal lines of the sorption of water vapor by Capron and Anid; Fig. 2: Wetting heats; Fig. 3: Differential wetting heats. Herefrom the authors draw the following conclusions: ✓

1) At a relative moisture p/p_s of up to 0.85 hardly any difference is observed between the isothermal lines of the sorption of water vapor by Capron or Anid. 2) No difference was further observed between the wetting heats of the two substances. 3) The calculated differential wetting heats (q_{diff}) show that the curve $q_{diff} = f(x)$ has two sections with constant values, which correspond to the hydration heats of the free carbamide groups as well as to the heat liberated by other processes. The same quantity of bound water corresponds to one carbamide group of Capron or Anid, respectively. The structural difference

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Sorption of Water Vapor and the Wetting Heat
of Some Polyamides

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B004/B007

between the two polyamides is without influence upon their hydrophile nature. 4) Determination of the quantity x_0 of bound water from the equation $x_0 = q_{\text{integr}}/80$ leads to the same values, irrespective of the fact whether for q_{integr} the experimental data or the values calculated from the change in q_{diff} are put. The authors mention a paper by N. V. Mikheylov and E. Z. Faynberg (Ref. 3), and thank A. V. Dumanskiy, Academician of the AS UkrSSR, for his advice. There are 3 figures, 1 table, and 11 references: 10 Soviet and 1 American. ✓

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR, Kiyev
(Institute of General and Inorganic Chemistry of the
AS UkrSSR, Kiyev)

SUBMITTED: February 25, 1960

Card 3/3